DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY CONSTRUCTION PERMIT

Permit No. 792CP01 March 14, 2003
Application Number X-174

The Department of Environmental Conservation (department), under the authority of AS 46.14 and 18 AAC 50, issues a construction permit to TPS Technologies Inc. for soil remediation and ancillary activities using a transportable soil remediation unit.

This permit satisfies the obligation of the owner and operator to obtain a construction permit as set out in AS 46.14.130(a).

As required by AS 46.14.120(c), the permittee shall comply with the terms and conditions of this construction permit.

[18 AAC 50.320(b), 1/18/97]

John F. Kuterbach, Manager
Air Permits Program

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List of Abreviations

AAC ..... Alaska Administrative Code
ADEC..... Alaska Department of Environmental Conservation
AS ..... Alaska Statutes
ASTM..... American Society of Testing and Materials
bbl..... 1 barrel oil = 42 US gal.
bhp..... brake horsepower or boiler horsepower [1]
CEMS..... Continuous Emission Monitoring System
C.F.R. ..... Code of Federal Regulations
CO..... Carbon Monoxide
COMS..... Continuous Opacity Monitoring System
dscf..... Dry standard cubic feet
EPA..... US Environmental Protection Agency
gr/dscf..... grain per dry standard cubic feet (1 pound = 7000 grains)
GPH..... gallons per hour
HAPS ..... Hazardous Air Pollutants
[hazardous air contaminants as defined in AS 46.14.990(14)]
H_2S..... Hydrogen Sulfide
HHV..... Higher heating value
ID ..... Source Identification Number
kW..... kilowatts
MACT..... Maximum Achievable Control Technology
Mlb..... thousand pounds
MMBtu..... Million British Thermal Units
NAICS ..... North American Industry Classification System
NESHAPs..... Federal National Emission Standards for Hazardous Air Pollutants
[as defined in 40 CFR 61]
NSPS..... Federal New Source Performance Standards [as defined in 40 CFR 60]
NO_x ..... Oxides of Nitrogen
ppm..... Parts per million
ppmv..... Parts per million volume
PS..... Performance specification
PSD..... Prevention of Significant Deterioration
RM ..... Reference Method
SIC ..... Standard Industrial Classification
SO_2..... Sulfur dioxide
TPH..... Tons per hour
TPY..... Tons per year
VOC..... volatile organic compound [as defined in 18 AAC 50.990(103)]
Wt% ..... weight percent

[1] 1 boiler horsepower = 33,472 Btu-fuel per hp-hr divided by the boiler's efficiency. 1 brake hp = 7000 Btu-fuel per hp-hr.

Identification

Names and Addresses

Permittee:	TPS Technologies Inc. 7400 E. McDonald Dr. Suite 3-123 Scottsdale, AS 85250
Facility:	soil remediation unit
Location:	55° 12’ 15.84” N, 162° 41’ 54.6” W
Physical Address:	Block 4, Lot 5, Cold Bay Subdivision, AK state Land Survey #79-82, Aleutian Island Recording District. Baranov Rd. Cold Bay, Alaska
Owner/Operator:	TPS Technologies Inc. 7400 E. McDonald Dr. Suite 3-123 Scottsdale, AS 85250
Permittee’s Responsible Official	Mr. Barry Hinton Vice President TPS Technologies, Inc. 7400 E. McDonald Dr. Suite 3-123 Scottsdale, AZ 85250 Phone: (480) 367-5885 Fax: (480) 367-6938
Designated Agent:	None
Facility and Building Contact:	Barry Hinton
Fee Contact:	Barry Hinton
SIC Code of the Facility: NAICS Code:	4959, Soil Remediation Services 562910

[18 AAC 50.320(a), 1/18/97]

Authorization

1. This permit authorizes TPS Technologies Inc. to establish temporary[2] operations of the sources listed below in Table 1 and associated ancillary equipment.[3] The permittee must comply with the terms and conditions applicable to the equipment. The operator must report for the applicable standards for each piece of equipment.

   This authorization is applicable only at the location identified in this permit.

Table 1: Construction Permit Source Inventory

ID	Serial No.	Source	Source Description	Fuel Type[1]	Rating/size
1	--	Rotary Kiln	SRS, M/N 1025, S/N 9010	Diesel	24.8 MM Btu/hr
2	--	Thermal Oxidizer	Hauck Inc., WRO 786 Series 100	Diesel	22.1 MM Btu/Hr
3	--	Bag House	SRS 0012K	--	7,460 dscf/min
4	30A03916	Electric Generation Set	Caterpillar 3208	Diesel	241 bhp

Standard Permit Conditions

(Please note that these are standard conditions taken directly from 18 AAC 50.345(b) through 18 AAC 50.345(o). Condition 12.a, does not limit the Federal Credible evidence rule 62 FR 8314.

2. The permittee must comply with each permit term and condition. Noncompliance constitutes a violation of AS 46.14, 18 AAC 50, and the Clean Air Act, except for those requirements designated as not federally-enforceable, and is grounds for:
   2.1 an enforcement action,
   2.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280, or
   2.3 denial of a construction-permit renewal application.

   [18 AAC 50.345(c), 8/15/02]
   [18 AAC 50.320(a)(1), 8/15/02]

3. It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

   [18 AAC 50.345(d), 8/15/02]
   [18 AAC 50.320(a)(2), 8/15/02]

4. Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of this permit.

   [18 AAC 50.345(e), 8/15/02]
   [18 AAC 50.320(e), 8/15/02]

5. Compliance with permit terms and conditions is considered to be compliance with those requirements that are:
   5.1 included and specifically identified in the permit, or
   5.2 determined in writing in the permit to be inapplicable.

   [18 AAC 50.345(b), 8/15/02]
   [18 AAC 50.320(a)(2), 8/15/02]

6. The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any construction permit condition.

   [18 AAC 50.345(f), 8/15/02]
   [18 AAC 50.320(a-c), 8/15/02]

[2] Temporary means 24 months from initial startup of the kiln dryer, including any period of inactivity.
[3] An example would be a soil remediation unit operating with a rock crushing equipment subject to Subpart OOO.

7. The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.345(g), 8/15/02]
[18 AAC 50.320(b), 8/15/02]

8. The permittee shall allow an officer or employee of the department or an inspector authorized by the department, upon presentation of credentials and at reasonable times with the consent of the owner or operator, to:

8.1 enter upon the premises where a source subject to the construction permit is located or where records required by the permit are kept,

8.2 have access to and copy any records required by the permit,

8.3 inspect any facilities, equipment, practices, or operations regulated by or referenced in the permit, and

8.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.345(h), 8/15/02]
[18 AAC 50.320(a)(2), 8/15/02]

9. **Certification.** The permittee shall certify all reports, compliance certifications, or other documents submitted to the department and required under this permit by including the signature of a responsible official for the permitted facility following the statement:

> "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete."

For the same three-month reporting period, the excess emission reports submitted pursuant to Condition 16.6 of *"Monitoring, Record Keeping, and Reporting for Air Pollution Prohibited,"* and Condition 17.1a(ii) of *"Excess Emissions and Permit Deviation Reports,"* may be certified with the operating report required by Conditions R2 through R14. All other reports must be certified upon submittal.

[18 AAC 50.205, 8/15/02]
[18 AAC 50.345(j), 7/11/02]
[18 AAC 50.320(a)(2)(E), 8/15/02]

10. **Submittals.** Unless otherwise directed by the department or this permit, the permittee shall send reports, compliance certifications, and other documents required by this permit to ADEC, Fairbanks Air Permits Office, Compliance Assurance, 610 University Avenue, Fairbanks, AK 99709.

[18 AAC 50.320(a)(2)(E), 8/15/02]

11. **Information Requests.** The permittee shall furnish to the department, within a reasonable time, any information the department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the permittee shall furnish to the department copies of records required to be kept by this permit. The department, in its discretion, will require the permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.200, 8/15/02]
[18 AAC 50.345(i), 8/15/02]
[18 AAC 50.320(a)(2) & 18 AAC 50.320(a)(2)(A-E), 8/15/02]

12. The permittee shall conduct source testing as requested by the department and shall:

a. use the applicable test methods set out in 40 C.F.R. Part 60, Appendix A, and 40 C.F.R. Part 61, Appendix B, to ascertain compliance with applicable standards and permit requirements,

b. submit to the department, within 60 days after receiving a request and at least 30 days before the scheduled date of the tests, a complete plan for conducting the source tests,

c. give the department written notice of the tests 10 days before each series, and

d. within 60 days after completion of the set of tests, submit the results, to the extent practical, in the format set out in *Source Test Report Outline* in Volume III, Section IV.3 of the State Air Quality Control Plan, adopted by reference in 18 AAC 50.030(8).

[18 AAC 50.345(k), (m), (n), (o), 5/3/2002]
[18 AAC 50.320(a)(2) & 18 AAC 50.320(a)(2)(A-E), 8/15/02]

Standard Construction Permit Conditions

This section contains permit conditions for air quality construction permits adopted by reference in 18 AAC 50.346 (a) (1-3).

13. **Assessable Emissions.** The permittee shall pay to the department annual emission fees based on the facility's assessable emissions as determined by the department under 18 AAC 50.410. The assessable emission fee rate is set out in 18 AAC 50.410. The department will assess fees per ton of each air contaminant that the facility emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is the lesser of

13.1 the facility's assessable potential to emit of 242.3 tpy; or

13.2 the facility's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon actual annual emissions emitted during the most recent calendar year or another 12 month period approved in writing by the department, when demonstrated by

a. an enforceable test method described in 18 AAC 50.220;
b. material balance calculations;
c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or
d. other methods and calculations approved by the department.

[18 AAC 50.346(a)(1)] 8/15/02

14. **Assessable Emissions Estimates.** Emission fees will be assessed as follows:

14.1 no later than March 31 of each year, the permittee may submit an estimate of the facility's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 410 Willoughby Ave., Juneau, AK 99801-1795; the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the department can verify the estimates; or

14.2 if no estimate is received on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set out in Condition 13.

[18 AAC 50.346(a)(1)] 8/15/02

15. **Air Pollution Prohibited.** No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. (18 AAC 50.110)

[18 AAC 50.346(a)(2)] 8/15/02

16. **Monitoring, Record Keeping, and Reporting for Air Pollution Prohibited.**

16.1 If emissions present a potential threat to human health or safety, the permittee shall report any such emissions according to Condition 17, *"Excess Emissions and Permit Deviation Reports*."

16.2 As soon as practicable after becoming aware of a complaint that is attributable to emissions from the facility, the permittee shall investigate the complaint to identify emissions that the permittee believes have caused or are causing a violation of Condition 15, *"Air Pollution Prohibited."*

16.3 The permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if

a. after an investigation because of a complaint or other reason, the permittee believes that emissions from the facility have caused or are causing a violation of Condition 15; or

b. the department notifies the permittee that it has found a violation of Condition 15.

16.4 The permittee shall keep records of

a. the date, time, and nature of all emissions complaints received;

b. the name of the person or persons that complained, if known;

c. a summary of any investigation, including reasons the permittee does or does not believe the emissions have caused a violation of Condition 15; and

d. any corrective actions taken or planned for complaints attributable to emissions from the facility.

16.5 With each operating report under this permit the permittee shall include a brief summary report which must include

a. the number of complaints received;

b. the number of times the permittee or the department found corrective action necessary;

c. the number of times action was taken on a complaint within 24 hours; and

d. the status of corrective actions the permittee or department found necessary that were not taken within 24 hours.

16.6 The permittee shall notify the department of a complaint that is attributable to emissions from the facility within 24 hours after receiving the complaint, unless the permittee has initiated corrective action within 24 hours of receiving the complaint.

[18 AAC 50.346(a)(2)] 8/15/02

17. **Excess Emissions and Permit Deviation Reports.**

17.1 Except as provided in Condition 16, *"Monitoring Record Keeping, and Reporting for Air Pollution Prohibited*," the permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commences or is discovered, report

(i) emissions that present a potential threat to human health or safety; and

(ii) excess emissions that the permittee believes to be unavoidable;

b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or non-routine repair that causes emissions in excess of a technology based emission standard;

c. report all other excess emissions and permit deviations

(i) within 30 days of the end of the month in which the emissions or deviation occurs, except as provided in Conditions 17b(i); and

(ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the department provides written permission to report under Condition 17bc.

When reporting excess emissions, the permittee must report using either the department's online form, which can be found at www.dec.state.ak.us/awq/excess/report.asp, or, if the permittee prefers, the form contained in ATTACHMENT 5: Excess Emissions Reporting Form, or the most recent version of the ADEC Notification Form available from the department. The permittee must provide all information called for by the form that is used.

17.2 When reporting a permit deviation, the permittee must report using the form contained in ATTACHMENT 5: Excess Emissions Reporting Form. The permittee must provide all information called for by the form.

17.3 If requested by the department, the permittee shall provide a more detailed written report as requested to follow up an excess emissions report.

[18 AAC 50.346(a)(3)]

Permit Conditions: Drum Dryer, Rotary Kiln & Afterburner

18. **Opacity & Particulate Matter Emissions**

18.1 A. Do not reduce visibility through the exhaust effluent by more than 20% for a total of more than three minutes in any one hour. B. Monitor using monitoring plan conditions M2-M8, M10, M12, M14, M18-M20 C. Report using EE2, R1-R3, R10.

18 AAC 50.055(a)(1) 1/18/97 and
18 AAC 50.050(a)(1) 5/26/72

18.2 A. Do not emit particulate matter concentrations greater than 0.05 gr/dscf if the facility commenced operation after July 1972, or 0.1 grains/dscf if the facility commenced operation before July 1972. [18 AAC 50.055(b)(3)]. B. Monitor using monitoring plan conditions M2-M10, M14, M18-M22. C. Report using EE2, R1-R3.

18 AAC 50.055(b)(1) & (3) 1/18/97 and
18 AAC 50.050(b)(1)&(3) 5/26/72

For facilities using a baghouse

18.3 A. Inspect the interior of the baghouse and complete any required maintenance after shutdown periods lasting more than 5 days. Within 30 days of operation, re-inspect the baghouse. Replace any worn out or damaged bags within 72 hours of discovery. B. Monitor using M14 and M15. C. Report any deviations using R3 and R13.

18 AAC 50.055(a)(1), (b)(1) & (3) 1/18/97 and
18 AAC 50.050(a)(1),(b)(1)&(3) 5/26/72

18.4 A. Operate the baghouse efficiently to control opacity and particulate matter. B. Monitor baghouse operations using M18. C. Report any deviations using R13.

18 AAC 50.055(a)(1), (b)(1) & (3) 1/18/97
and 18 AAC 50.050(a)(1),(b)(1)&(3) 5/26/72

18.5 Inspect every component of the control device before the first operation each season and repair or replace any component that shows signs of deterioration.

18 AAC 50.055(a)(1), (b)(1) & (3) 1/18/97
and 18 AAC 50.050(a)(1),(b)(1)&(3) 5/26/72

For facilities using a scrubber

18.6 A. Monitor and record once a day the minimum and maximum differential pressure across the gas side of the scrubber (inches of water). B. Monitor the operating parameters using M7 and M19. C. Report any deviations using R3 and R13.

18 AAC 50.055(a)(1), (b)(1) & (3) 1/18/97
and 18 AAC 50.050(a)(1),(b)(1)&(3) 5/26/72

18.7 A. Monitor the scrubber water flow rate on a daily basis. B. Monitor the operating parameters using M8 and M20. C. Report any deviations using R3 and R13.

18 AAC 50.055(a)(1), (b)(1) & (3) 1/18/97
and 18 AAC 50.050(a)(1),(b)(1)&(3) 5/26/72

18.8 Inspect every component of the control device before the first operation each season and repair or replace any component that shows signs of deterioration.

18 AAC 50.055(a)(1), (b)(1) & (3) 1/18/97 and
18 AAC 50.050(a)(1),(b)(1)&(3) 5/26/72

19. **Sulfur-Oxide Emissions**

19.1 Do not emit sulfur dioxide concentrations greater than 500 parts per million.

18 AAC 50.055(c) 1/18/97, 18 AAC 50.050(c) 5/26/72

19.2 A. Do not burn fuel oil with a sulfur content greater than 0.5% by weight. B. Monitor using monitoring plan conditions M25 and M26. C. Report using EE2, R4-R6, R8 and R9.

18 AAC 50.055(c) 1/18/97, 18 AAC 50.050(c) 5/26/72

19.3 Do not burn fuel oil with a sulfur content greater than 0.075% by weight while operating in the Sulfur Dioxide Special Protection Areas as defined in 18 AAC 50.025 and the permit application, Section X.B. Monitor using monitoring plan conditions M25 and M26. C. Report using EE2, R4-R6, R8 and R9.

18 AAC 50.025(c)(1)&(2) 1/18/97

19.4 A. If burning used oil blend 1 part on-site generated used oil with at least 3 parts of fuel oil (25% used oil with 75% fuel oil). B. Monitor using M26. C. Report using R6 and R9.

18 AAC 50.055(c) 1/18/97, 18 AAC 50.050(c) 5/26/72

Diesel Engines that do not meet EPA's definition of a "nonroad" engine[4] and Insignificant Sources

20. **Opacity & Particulate Matter Emissions**

20.1 A. Do not reduce visibility through the exhaust effluent by more than 20% for a total of more than three minutes in any one hour or by 20% for more than any six consecutive minutes. B. Monitor using monitoring plan conditions M15 and M23. C. Report using EE2 and R10.

18 AAC 50.055(a)(1) 1/18/97 and 18 AAC 50.050(a)(1) 5/26/72

20.2 A. Do not emit particulate matter concentrations greater than 0.05 gr/dscf. B. Monitor diesel engines using monitoring plan conditions M15 and M23. C. Report using R3 and R13.

18 AAC 50.055(b)(1) 1/18/97 and 18 AAC 50.050(b)(1) 5/26/72

21. **Sulfur-Oxide Emissions**

21.1 A. Do not emit sulfur dioxide concentrations greater than 500 parts per million.

18 AAC 50.055(c) 1/18/97 and 18 AAC 50.050(c) 5/26/72

21.2 A. Do not burn fuel oil with a sulfur content greater than 0.5% by weight. B. Monitor using monitoring plan conditions M25 and M26. C. Report using EE2, R4-R6, R8 and R9.

18 AAC 50.055(c) 1/18/97 and 18 AAC 50.050(c) 5/26/72

21.3 A. Do not operate diesel engines for power generation while operating in the Sulfur Dioxide Special Protection Area as defined in 18 AAC 50.025 and the application, Section X. B. Monitor using monitoring plan conditions M25 and M26. C. Report using EE2, R4-R6, R8 and R9.

18 AAC 50.025(c) 1/18/97

21.4 A. If burning used oil, blend on-site generated used oil (one part) with at least 3 parts fuel oil. (25% used oil with 75% fuel oil). B. Monitor using M26. C. Report using R6 and R9.

18 AAC 50.055(c) 1/18/97 and 18 AAC 50.050(c) 5/26/72

[4] Nonroad engines are defined in 40 CFR 89.2. See ATTACHMENT 7 for the definition.

Equipment subject to Subpart OOO (40 CFR 60.670)

Equipment subject to Subpart OOO is at a fixed plant with a cumulative rating of all initial[5] crushers greater than 25 tons per hour; or at a portable plants with greater then 150 tons per hour cumulative ratings. Only the pieces of equipment installed, reconstructed[6] or modified after August 31, 1983 are subject to Subpart OOO. The pieces of equipment affected by the applicable conditions are rock crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations. Please see N1.1-1.4 for requirements in order to replace parts of equipment subject to Subpart OOO.

22. **Emission Points *without* Mechanically Induced Air Flow**

Conditions 15.1 (A), (B) and (C) apply to emission points at a processing plant that ***do not*** have mechanically induced airflow to capture or exhaust particulate matter. Performance tests are required.

22.1 Do not allow emissions to reduce visibility through the exhaust effluent by more than A. 15 percent opacity from any crusher at which a dust capture system is not used,(40 CFR 60.672(c)) or 10 percent opacity from each transfer point on a subject belt conveyor or from any other subject source (40 CFR 60.672(b)) B. Monitor these operations using Condition M10, M27 and M28. C. Report operations using EE2, R3, and R12.

Per 40 CFR 60.672(d), this condition does not apply to truck dumping into any screening operation, feed hopper, or crusher.

22.2 A. At all times, the permittee shall to the extent practicable, maintain and operate their facility including air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. B. Monitor using M10. C. Report using R3.

[40 CFR 60.11(d), 3/26/87]

22.3 Mark each piece of equipment that is subject to Subpart OOO with the letters “NSPS” that are plainly visible and are at least 3 inches high, or with other clearly identifiable markings.

[18 AAC 50.350(d)(3), 1/18/97]

[5] Initial crushers are defined as crushers that process some rock that has not been previously crushed.

[6] Reconstructed is defined in 40 CFR 60.673.

Subpart Kb Storage Tanks[7]

23. **Volatile Organic Compounds** [adopted by reference in 18 AAC 50.040(a)(2)(M) 1/18/97, 40 CFR 60.116b(a) & (b) 4/8/87]
Keep accessible records for the life of the vessel subject to this requirement showing the dimension of each storage vessel, its capacity and the calculations for computing capacity of the storage vessel. 40 CFR 60.116b(a) & (b) 4/8/87

This condition applies to *stationary* fuel storage tanks that are:

- Constructed, reconstructed or modified after July 23, 1984; and
- Have a capacity:
  - between 10,000 and 20,000 gallons;
  - between 20,000 and 40,000 gallons and store fuels that exert an equilibrium vapor pressure less than 2.2 psia; or
  - greater than 40,000 and store fuels that exert an equilibrium vapor pressure less than 0.5 psia.

Stationary means tanks not attached to a mobile vehicle or vessel.

[7] A Subpart Kb storage tank is defined as a storage vessel with a capacity greater than or equal to 40 cubic meters used to store volatile organic liquids at a facility that is constructed, reconstructed, or modified after July 23, 1984.

Facility-Wide Conditions

24. **Dust**

24.1 A. Take reasonable precautions[8] to prevent the release of airborne particulate matter from the following:

1. treated and untreated soil piles,
2. conveyors,
3. loading locations,
4. the drum dryer,
5. crushers,
6. screens,
7. baghouse ash discharge,
8. vehicle traffic within the facility boundaries, and
9. any other sources of fugitive dust.

B. Monitor emissions and associated operating parameters using monitoring plan conditions M10 and M11. C. Report using R12 and R3.

[18 AAC 50.045(d) 1/18/97]

24.2 Comply with the fugitive dust plan in ATTACHMENT 3: Fugitive Dust and VOC Control Plan. If requested by the department, submit a new fugitive dust control plan by a date indicated and comply with the new plan. B. Monitor using monitoring plan condition M10. C. Report using R3

[18 AAC 50.045(d) 1/18/97]

24.3 The plant shall not practice dispersion techniques as stated in 18 AAC 50.045 to meet the standards listed in this permit. Report using the annual compliance certification contained in this permit.

[18 AAC 50.045(a) 1/18/97, 18 AAC 50.530 (a) 11/1/82]

25. **Operation & Maintenance (18 AAC 50.055(a) and (b))**

25.1 A. Follow the Operations and Maintenance Plan that was submitted with the application (to the department). The plan describes how the facility will be operated and maintained in order to comply with the emission limits as specified in this permit. B. Monitor the facility operations and maintenance using M15. C. Report deviations from the plan using R13.

[18 AAC 50.055(a)(1) & (b)(1) 1/18/97, 18 AAC 50.050(a)(1)&(b) (2) 5/26/72]

26. **Other Requirements** ***State only requirements*** authorized in 18 AAC 50.350(f)(3)

26.1 A. Install an afterburner to destroy organic compounds removed from the contaminated soil. Operate the equipment so that the concentration of carbon monoxide in the afterburner exhaust gas does not exceed 100 parts per million corrected to 7 percent oxygen during operation and shut down operations. This threshold is a 1-hour average based on continuous emission monitor (CEM) 1-minute readings. B. Monitor using monitoring plan conditions M10 and M17. C. Report using R2 and R14.

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[8] "Reasonable precautions" for soil remediation units include but are not limited to the following, as necessary to prevent particulate matter from becoming airborne and leaving the facility boundaries:

◊ installation and use of hoods, fans, and dust collectors to enclose and vent dusty materials;
◊ other covers and enclosures to prevent generation or release of fugitive dust;
◊ cleanup of loose material on work surfaces;
◊ minimizing drop distances by adjusting conveyor heights or lowering loader buckets to be in contact with surface of soil or ground before dumping; and

application of asphalt, water, or suitable chemicals to prevent generating fugitive dust.

26.2 A. Install, calibrate, operate, and maintain the CEM to measure and record the concentrations of carbon monoxide from the afterburner exhaust stack. B. Monitor using M17 and M24. C. Report the Quality Assurance Procedures in ATTACHMENT 6 with the semi annual operating report required in R2 as well as excess emissions using EE1, R3.

26.3 A. Prior to adding soils to the unit, heat and maintain the afterburner temperature to at least 1500EF. B. Monitor using M10 and M16. C. Report using R3, R13, EE1.

26.4 Only remediate soils that are contaminated with: crude oil, liquefied natural gas, gasoline, fuel oil, and other non-chlorinated refined petroleum products. Do not burn soil contaminated with hazardous waste listed under the Resource Conservation and Recovery Act (RCRA) or toxic substances listed under the Toxic Control Act (TSCA). B. Monitor using M10. C. Report using R3.

26.5 Comply with the VOC control plan in ATTACHMENT 3: Fugitive Dust and VOC Control Plan. If requested by the department, submit a new VOC control plan by a date indicated and comply with the new plan. B. Monitor using M10. C. Report using R3.

27. **Relocation**

Prior to operating at a location other than the one identified in this permit, obtain a construction permit for operations at the new location **or** GP-4 General Operating Permit. Submit a revised Fugitive Dust and VOC Control Plan if you will be using a different control strategy for fugitive emissions of dust and VOC at the new location.

[AS 46.14.130, 6/25/93]
[18 AAC 50.315(e), 7/11/2002]
[18 AAC 50.300,5/3/2002]
[AS 46.14.215, 6/25/93]

Compliance Monitoring Plan

Obtain the following records to determine compliance with the permit conditions. Keep these records accessible for five years. [18 AAC 350(h)(5) 1/18/97]

Daily Records

(if operating, keep the following records M1-M8)

M1. Date: _____

M2. Tons of contaminated soil processed: _____.

M3. Maximum hourly processing rate: _____ tons/hr

M4. The average fines percentage _____ ASTM D422-63 or equivalent, at least once per job, repeat if soil characteristics change.

M5. Baghouse temperature (Fahrenheit)

M6. Differential pressure across the baghouse (inches of water)

M7. Minimum and Maximum differential pressure drop across the scrubber: _____ inches of water

M8. Minimum water flow rate: _____ gallons/hr

M9. ❑ Yes ❑ No Did you deviate from the dust or VOC control plan? If yes, explain how you deviated from the plan and why you deviated from the plan.

[18 AAC 350(d)(3) 1/18/97 for M1-M9]

Deviation from Permit Conditions

(as necessary)

M10. Keep a list of all deviations from Conditions 15 – 26. Include

- The date;
- The equipment involved;
- The permit condition;
- A description of the deviation; and
- Actions taken to solve the problem.

[18 AAC 350(d)(3)& (f)(3) 1/18/97]

Complaint Logs

(as necessary)

M11. Keep a written log of all

- Air pollution complaints received;
- Dates of complaints and permittee's response to complaints;
- Investigations to determine the cause of the complaints; and
- Any actions taken to resolve the complaints and the date the action was taken.

[18 AAC 350(f)(3) 1/18/97]

_____
Signature

_____ _____
Printed Name Title

Visible Emission Monitoring

(upon initial startup, and every 30 days of operations)

M12. Visible emission readings shall be taken when the facility is operating at or near maximum load. The facility shall perform a visible emission observation in accordance with 40 C.F.R. 60, Appendix A, Method 9. The visible emission readings should occur within two days of initial startup, at least once during a 30-day operating period, and when the facility starts up after a shut down period of more than 5 days. Use the form in ATTACHMENT 1 -Visible Emissions Forms. This requirement does not apply to heaters and insignificant sources. Note the equipment production or operating rate at the time of the Method 9 observation. Method 9 testing consists of at least 24 readings, one every 15 seconds.

Semi-annual fuel monitoring

M13. Record the amount of fuel used at the facility during the semi-annual operating reporting period. [18 AAC 350(d)(3) 1/18/97]

Keeping Maintenance Logs

M14. Keep a maintenance log of all baghouse inspections and bag replacement. [18 AAC 350(d)(3) 1/18/97]

M15. Keep a maintenance log of activities performed in accordance with the manufacturer's preventative maintenance plan and the Operations and Maintenance Plan submitted to the department. [18 AAC 350(d)(3) 1/18/97]

Daily Monitoring and Recordkeeping

M16. Monitor and record once per day the afterburner outlet temperature (EF). [18 AAC 350(d)(3) 1/18/97]

M17. Monitor and record the carbon monoxide emissions using 40 C.F.R. 60, Appendix A, Reference Method 10. All applicable quality procedures in 40 CFR 60 Appendix F should be monitored and reported. [18 AAC 350(d)(3) 1/18/97]

For facilities using a baghouse:

M18. Do not exceed the baghouse minimum and maximum operating temperature determined by manufacturer's data or source test data. Maintain the manufacturer's recommended or source test determined differential pressure across the baghouse. Monitor and record once a day the baghouse exit temperature (EF) and differential pressure (see M5 and M6). 18 AAC 50.055(b)(1) & (3) 1/18/97 and 18 AAC 50.050(b)(1)&(3) 5/26/72

For facilities using a scrubber:

M19. Install and maintain manometer ports for measuring gas side pressure drop across the scrubber. Maintain a pressure drop no lower than 70% but no higher than 130% of the average pressure drop for which the most recent source test demonstrated compliance. 18 AAC 50.055(a)(1), (b)(1) & (3) 1/18/97 and 18 AAC 50.050(a)(1),(b)(1)&(3) 5/26/72

M20. Maintain a scrubber water flow rate that is at least 80% of the average water flow rate for which the most recent source test demonstrated compliance. 18 AAC 50.055(b)(1) & (3) 1/18/97 and 18 AAC 50.050(b)(1)&(3) 5/26/72

Once in permit

M21. If the permittee did not submit a particulate matter source test (in accordance with Condition 10) with the application or refer to a source test less than 5 years old on file with the department, the facility must conduct a source test within the first 30 operating days. If the results for the most recent test are 0.045 gr/dscf or greater, conduct another source test within one year. When conducting a source test, record the information included in ATTACHMENT 4: Source Test Operational Parameter Recording. The source test should occur while processing soil that is representative of what the facility normally processes. Record the fines content and soil throughput that represents normal operation.

18 AAC 50.055(b)(1) & (3) 1/18/97 and
18 AAC 50.050(b)(1)&(3) 5/26/72

Before processing soil greater than 30% fines

M22. Conduct a particulate matter source test when remediating soil containing 30% fines or greater, as determined by ASTM D422-63 or equivalent unless this is representative of your process as tested in M21, in the range where the source test showed compliance with the particulate standard. In lieu of a source test, the following equation may be used or another equation proposed by the permittee. The department must approve the equation proposed by the permittee prior to remediating the soil.

F = fines (%) R = Soil production rate (tons/hr or lb/hr)

X = particulate concentration (gr/dscf) Test = values from source test in M21

25% = SF safety factor Actual = what the facility would like to produce

$$F_{actual} * R_{actual} = \frac{0.05 \text{ gr/dscf} * F_{test} * R_{test}}{X_{test}} * (1\text{-SF})$$

Example: A facility source test shows compliance with the particulate standard at a Soil production rate of 10,000 lbs/hr at 15% fines. They have a job remediating soil with 30% fines content. Find the maximum soil production rate that will maintain compliance with the particulate standard. The facility source test showed particulate matter emissions of 0.03 gr/dscf at 15% fines and a soil production rate of 10000 lbs/hr.

$$0.3 * R_{actual} = \frac{0.05 \text{ gr/dscf} * 0.15\% * 10{,}000 \text{ lbs/hr}}{0.03 \text{ gr/dscf}} * 0.75\%$$

R_{actual} = 6250 lb/hr

The facility may not exceed 6250 lb/hr while processing soil with 30% fines.

18 AAC 50.055(b)(1) & (3) 1/18/97 and 18 AAC 50.050(b)(1)&(3) 5/26/72

M23. Visible Emissions and Particulate Matter Inspections. [18 AAC 350(d)(3) 1/18/97]

A flow chart contained in ATTACHMENT 2 Visibility and Particulate Monitoring Flow Chart illustrates this tiered monitoring approach.

A.1 Smoke/No smoke Inspection Period

Once a day for the first 30 operating days of this permit, observe each engine, boiler, and heater to determine the presence or absence of smoke (a smoke/no-smoke inspection). If smoke, excluding water vapor, is seen during the inspection, do one of the following supplemental actions:

- Do maintenance to eliminate the smoke, and repeat the smoke/no smoke inspection within 72 operating hours; if no smoke is seen during the required repeat inspection, start a new 30 day inspection period; or,

- Within 10 calendar days, not operating days, of the initial inspection that showed smoke, do a visible emission inspection that conforms to EPA Method 9 in 40 C.F.R. 60, Appendix A, three times, once every two hours. See section B of this condition for more detail on the Method 9 test.

A.2 Monthly monitoring

- If no smoke is seen during the first 30 days of operation during the smoke/no smoke inspection, continue smoke/no smoke inspections on a monthly basis to check for engine or combustion unit degradation.

- If smoke is seen during any monthly inspection, start a new 30-day smoke/no smoke inspection period or do the Method 9 testing described in Section B of this condition.

A.3 How to perform the smoke/no smoke inspection

For each smoke/no smoke inspection, record the

- Date
- Engine or equipment number
- Load,
- Plume background, and
- Visible emission observation.

Do all inspections required by this condition at the highest load for that engine or combustion unit expected for the month. If this is not practicable or the test is less than 80% of design load, please attach an explanation.

Exceptions:
The visible emission inspections are not required in a given month for a boiler or heater, if the rated input capacity is less than 1,700,000 Btu/hr.

B. Method 9

If the facility is not able to eliminate visible emissions through maintenance then the facility is required to perform an opacity test using EPA Method 9 within 10 calendar days of the initial smoke/no smoke inspection that showed smoke. The opacity test consists of three Method 9 tests, taken with minimum of two hours in between each test.

If the results of each of the three Method 9 tests are zero, then the facility may begin a new 30-day smoke/no smoke inspection as described in section A or perform one Method 9 reading each subsequent month.

If the results of each of the three Method 9 reading are greater than zero but less than 20% opacity, perform one Method 9 reading each subsequent month.

If any of the three-minute average of the method 9 readings are greater than 20%, the facility is in violation of the opacity standard.

If at any time the opacity readings are greater than 12% opacity, in addition to the requirements of this section, please see section C concerning particulate emissions.

If the required monthly Method 9 opacity reading for three consecutive months is zero, the permittee can continue performing Method 9 readings once per month or perform a 30-day smoke/no smoke inspection as described in section A1 of this monitoring condition. If no smoke is seen during the 30-day test, the permittee may perform monthly smoke/no smoke inspections every month instead of Method 9 readings.

For each Method 9 inspection, use the form in ATTACHMENT 1 -Visible Emissions Forms of this permit.

C. Particulate Matter

If the Method 9 readings required in "B" are greater than 12% but less than 20% opacity, then particulate matter emissions may exceed the particulate matter standard. Perform a Method 5 or other EPA approved method source test (within 30 days of Method 9 reading that exceeded 12%) to determine if the standard is maintained and that the particulate emissions are less than 0.05 gr/dscf. Continue the Method 9 readings as described in

"B". Take Method 9 readings during the particulate matter tests in order to calculate an average opacity that corresponds to the particulate matter emissions. Submit the test results to the department within 30 days of the testing completion. [18 AAC 350(d)(3) 1/18/97]

M24. Certify each carbon monoxide CEM in accordance with 40 C.F.R. 60, Appendix B, Performance Specifications 3 and 4. Record daily calibration drift measurements and take action required in ATTACHMENT 6.

Fuel & Used Oil Delivery

M25. Keep a delivery receipt for each shipment of fuel and used oil delivered to the facility. If using fuel oil other than ASTM D1, D2, or comparable, test each shipment for the fuel oil using the applicable ASTM Method. Acceptable methods include D975-84; D3120-92; D4152-90; D2622-91 and D4294-90. If using ASTM D1, D2, or comparable, keep copies of the fuel delivery records that indicate the ASTM fuel grade as defined in ASTM 396-92. [18 AAC 350(d)(3) 1/18/97]

M26. If burning used oil generated off-site, test the sulfur content of each shipment of used oil that is generated off-site and record the quantity of fuel accepted or keep supplier's sulfur content analysis. Test the fuel used to fulfill the blending requirement using the applicable ASTM test method and record the quantity of fuel used in the blend. Supplier certification is adequate as long as blending does not occur. Samples may be collected by the vendor from batches prepared by the local supplier for delivery to permittee's facility, or by supplier for bulk shipment not blended prior to delivery to the permittee's facility. If burning used oil generated on site, keep records of quantities. [18 AAC 350(d)(3) 1/18/97]

For Subpart OOO Non-Metallic Mineral Processing Plant -During the first 60 days

M27. Inspect each emission point subject to Condition 21 using Method 9 of 40 C.F.R. 60, Appendix A at the following times:

a. within 2 working days after initial startup
b. within 2 working days after startup after the processing plant has been shut down for 30 consecutive days; and
c. at least once in every 14 days of operation.

When doing Method 9 inspections, use the form in ATTACHMENT 1 -Visible Emissions Forms of this permit

[18 AAC 50.350(d)(3), 1/18/97; 40 C.F.R. 60.675(c), 2/4/89 40 C.F.R. 60.11(b)]

M28. If a performance test was not included with the permit application conduct a performance test as described by 40 C.F.R. 60.675(b)(1) and (2), within the first 60 days of operation under this permit. A performance test includes a Method 9 to determine visible emissions. Use the form provided in ATTACHMENT 1 -Visible Emissions Forms. Follow the requirements for a performance test given in P1-P4.

Performance Tests

(as required by 40 CFR 60.675 conducted as specified in 40 CFR 60.8)

P1. Perform performance tests within 60 days after achieving the maximum production rate of the equipment subject to a federal standard but not later than 180 days after initial startup. (This timeframe is for new units only.) The department and/or EPA may request additional performance test at their discretion. Please see M28 for required performance testing for existing units. [40 CFR 60.8(a), 5/17/89]

P2. Performance tests shall occur at the facility's representative operation. The permittee shall make available information so that the department and/or EPA can determine the facility's representative operation. [40 CFR 60.8(c), 5/17/89]

P3. Notify the department and EPA at least 30 days prior to the start of the performance tests. [40 CFR 60.8(d), 5/17/89]

P4. The permittee's initial opacity (visible emission) performance test must be 3 hours (30 six minute averages) during periods of operation. The opacity standard applies at all times except for startup, shutdown and malfunction. [40 CFR 60.11(b) and (c), 3/26/87]

Reporting Requirements

The department requires a facility operator using this general permit to perform four types of reports: (1) reporting emissions that have the potential to violate a permit condition, (2) semiannual operating reports, (3) notification of replacement of certain equipment, and (4) annual compliance certifications.

Reporting of Excess Emissions:

EE1. Potentially Injurious Emissions

Notify the department according to Condition 17 upon discovery of any emission that has the potential to violate Condition 15, at one of the following numbers:

Central Alaska	269-7500	Fax	269-7648
Northern Alaska	451-2121	Fax	451-2362
Southeast Alaska	465-5340	Fax	465-2237

Outside of normal business hours: 1-800-478-2237

Fax a completed Excess Emission Notification form (ATTACHMENT 5: Excess Emissions Reporting Form) within 24 hours to the Anchorage air quality office at 907 269 7508. [18 AAC 350(i)(1) 1/18/97]

EE2. Opacity, Particulate Matter and Fuel Sulfur Violations [18 AAC 350(i)(1) 1/18/97]

Notify the department within two days of:

- Completion of a Method 9 inspection showing a violation of a visible emission requirement;
- Receipt of results of a Method 5 performance test that shows a violation of a particulate matter standard; or
- Burning any fuel that exceeds 0.50% fuel sulfur or 0.075% sulfur within any Special Protection Area.

Immediate Reporting:

R1. Notify the department within two days of a pollution control equipment breakdown.

Semiannual Operating Reporting:

R2. Submit the following information to the department:

Submit three copies, including the original, of this semi-annual operating report to:

Alaska Department of Environmental Conservation
Air Quality Maintenance Section
610 University Avenue
Fairbanks, Alaska 99709-3643

And one copy to*:*

EPA-Region 10,
Office of Air Quality
1200 Sixth Avenue
Seattle, WA 98101

Facility Name _____ Date: _____

Semiannual Compliance Report for

10/1/___ - 3/31/___ Due on April 30

4/1/___ - 9/30/___ Due on October 30

(Select the correct operating period)

R3. Did the facility deviate from any permit requirements or a fugitive dust or VOC control plan?
If yes, explain (1) how you deviated from the plan, (2) the cause of the deviation, and (3) if it was necessary.
Attach:
(a) Copies of all visible emission reading results.
(b) Copies of all particulate matter performance test reports.
(c) A description of any complaints received, including:
- Date of the complaint and the response,
- Nature of the complaint,
- Results of the investigation, and
- Steps taken to resolve the complaint.

(d) A list of any deviations from permit conditions; include:
- The date or period
- Equipment involved
- The permit condition
- The nature of the deviation
- Actions taken to solve the problem

[18 AAC 50.350(d)(3), 18 AAC 50.350(i),1/18/97

R4. Fuel Delivery dates and grades:

Dates:	Quantity:	Fuel Grade:	or	Sulfur Content:
_____	_____	_____		_____
_____	_____	_____		_____
_____	_____	_____		_____
_____	_____	_____		_____
_____	_____	_____		_____

R5. Off-Site Used Oil Delivery:

Dates:	Quantity:	Sulfur Content:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

R6. Burned Used Oil (generated on-site):

Dates:	Quantity:	:
_____	_____	
_____	_____	
_____	_____	
_____	_____	
_____	_____	

R7. The amount of fuel used on a monthly basis**:**

R8. How did you ensure your facility blended the amount of used oil burned to achieve a 0.5% Sulfur by weight or less mix?

R9. How did you ensure your facility blended the amount of used oil generated on-site to achieve a one part used oil to three parts fuel oil mix?

R10. Attach copies of the required visible emission readings.

R11. For each day, the daily contaminated soil process rate and the total number of operation hours and peak hourly rate and percent fines.

R12. Provide a copy of any complaints received the nature of the complaint, and the steps taken to resolve the complaint including the date of when the person that initiated the compliant was contacted.

R13. Report any deviations from the facility's submitted Operations and Maintenance Plan.

R14. Submit any CEMS hourly average that exceeds the permitted limit and averaging times.

Based on information and belief formed after reasonable inquiry, I certify that the facility meets the qualifying criteria and that the statements and information in and attached to this document are true, accurate, and complete.

_____
Signature

_____
Printed Name

_____
Title

State of Alaska, City of _____ , Borough of _____

Replacing Equipment Built Before August 31, 1983

At your processing plant, equipment that was not constructed, reconstructed, or modified after August 31, 1983, is not subject to Subpart OOO. Replacing certain parts of it with equipment that is the same size or smaller does not make your plant subject to Subpart OOO, unless you replace all sources in a production line. But you must notify EPA and the department of the replacement.

If equipment is replaced with larger equipment, use Condition N2 (next page) to report.

N1. Notifying the department and EPA: Replacement of Equipment
[40 C.F.R. 60.676(a), 2/14/89; 18 AAC 50.200, 1/18/97]

Notify the department before replacing the following equipment. In addition to the information listed in Conditions N1.1 – N1.4, give enough detail to identify the replacement equipment. Also list any control device used to reduce particulate matter emissions from the equipment being replaced, and all other sources controlled by that control device.

N1.1 Before replacing a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station, send the department information describing
- the rated capacity (tons/hour) and age of the equipment being replaced, and
- the rated capacity (tons/hour) of the replacement equipment.

N1.2 Before replacing the screening operation, send the department information describing
- the total surface area and age of the top screen from the existing screening operation, and
- the total surface area of the top screen of the replacement.

N1.3 Before replacing a conveyor belt, send the department information describing
- the width and age of the existing belt, and
- the width of the replacement belt.

N1.4 Before replacing a storage bin, send the department information describing
- the rated capacity (tons) and age of the existing storage bins, and
- the rated capacity (tons) of the replacement storage bins.

Send notifications for condition N1 to:

Director of Emission Standards and Engineering Division
(MD-13)
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

Air Quality Maintenance Section
Alaska Department of Environmental Conservation
610 University Ave
Fairbanks, AK 99709-3643

New Equipment Subject to Subpart OOO

N2. Notifying the department and EPA: New, Reconstructed, or Modified Equipment
For a new or modified piece of equipment that becomes subject to Subpart OOO, send the department and EPA Region 10 any of the following information that applies during the life of this permit:
For this condition:

A modification is defined as a change to the equipment that increases

- The surface area of an initial screen
- The width of a conveyor belt, or
- The rated capacity of any other equipment

N2.1 The anticipated date of initial startup, postmarked between 30 and 60 days before anticipated startup. **[40 C.F.R. 60.7(a)(2), 12/13/90; 18 AAC 50.200, 1/18/97]**

N2.2 The actual date of initial startup postmarked within 15 days after initial startup.
[40 C.F.R. 60.7(a)(3), 12/13/90; 18 AAC 50.200, 1/18/97]

N2.3 For modification to an existing piece of equipment of a type listed in QC1. of the Qualifying Criteria of this permit, information describing:

- **the precise nature of the change**
- **the present and proposed emission control systems**
- **the capacity before and after the change**
- **the expected completion date.**

This condition does not apply to

- Routine maintenance, replacement, and repair
- Increase in production rate accomplished without capital expenditure
- Increase in hours of operation
- Use of alternative raw material if the equipment is already designed to handle that raw material
- Addition of pollution control equipment

Postmark 60 days or as soon as practicable before the change.
[40 C.F.R. 60.7(a)(4), 12/13/90; 18 AAC 50.200, 1/18/97]

N2.4 The date of initial Method 9 observations, –postmarked not less than 30 days before the date of the observations. [40 C.F.R. 60.7(a)(6), 12/13/90; 18 AAC 50.200, 1/18/97]

Send notifications for condition N2 to:

Laurie Kral
EPA Region 10
1200 Sixth Ave
Seattle, WA 98101

Air Quality Maintenance Section
Alaska Department of Environmental Conservation
610 University Ave
Fairbanks, AK 99709-3643

Annual Compliance Certification

Certify compliance annually by February 1 of each year for the period from January 1 to December 31 of the previous year in accordance with the format below. Submit two copies and the original to the ADEC, Air Quality Maintenance, 610 University Ave, Fairbanks, AK 99709-3643.
Also submit a copy to: US EPA Region 10, Office of Air Quality, 1200 6th Avenue, M/S OAQ 107, Seattle, Washington 98101
Permittee: _____Facility Name: _____Certification Period: _____

Condition	Compliance Status	Continuous/Intermittent	Method used to determine compliance
1-8	These conditions place no certification obligation on permittee		
9-10	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable (attach explanation)	❝ Continuous ❝ Intermittent	❝ Dates access granted, or not requested ❝ Other (attach description & documentation)
11	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ Dates submitted ❝ Other (attach description & documentation)
12	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All reports/documents certified ❝ Dates excess emission reports submitted
12	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ Dates submitted, or source test requested ❝ Other (attach description & documentation)
18.1	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
18.2	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
18.3	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
18.4	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
18.5	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
18.6	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
18.7	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
18.8	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
19.1	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)

19.2	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
19.3	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
19.4	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
20.1	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
20.2	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
21.1	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
21.2	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
21.3	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
21.4	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
22.1	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
22.2	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
22.3	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
23	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
24.1	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable (attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
24.2	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable (attach	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)

	explanation)		
24.3	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable (attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
25.1	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable (attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
26.1	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
26.2	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
26.3	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
26.4	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
26.5	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)

Based on information and belief formed after reasonable inquiry, I certify that the facility meets the qualifying criteria and that the statements and information in and attached to this document are true, accurate, and complete.

_____
Signature

_____ _____
Printed Name Title
State of Alaska, City of _____, Borough of _____

On this _____ day of _____, 19__ before me personally appeared _____, whose identity was proved to me on the basis of satisfactory evidence to be the person whose name is subscribed t this instrument, and acknowledged that he (she) executed the same.
_____ Notary Public

My Commission Expires on _____

ATTACHMENT 1 -Visible Emissions Forms

Page 1 of _____

When doing readings: Maintain a distance of at least 15 feet from the emission point; When possible while still conforming to Method 9, select a position to minimize interference between sources; If interference cannot be avoided between sources, use the least stringent opacity standard that applies to any of the sources involved; and If wet dust suppression is used, read the part of the plume where there are no visible emissions caused by water mist.

Company _____

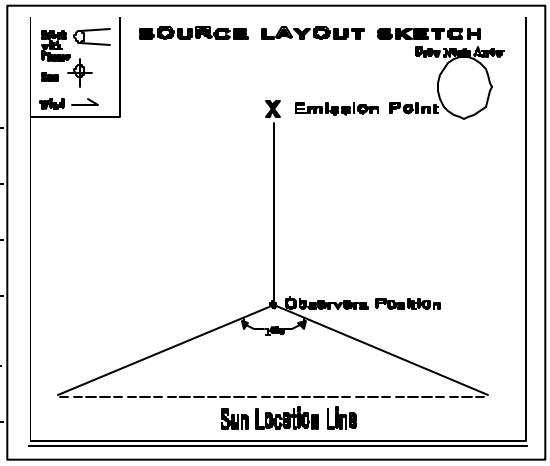
Location _____

Test No. _____ Date _____

Soil Remediation Unit: Source _____

Production Rate: _____ Tons/hr

Hrs. of observation: _____



Clock Time	Initial			Final
Observer location Distance to discharge				
Direction from discharge				
Height of observer point				
Background description				
Weather conditions Wind Direction				
Wind speed				
Ambient Temperature				
Relative humidity				
Sky conditions: (clear, overcast, % clouds, etc.)				
Plume description: Color				
Distance visible				
Water droplet plume? (attached or detached?)				
Other information				

Use the procedures specified in 40 C.F.R. 60, Appendix A, Method 9 to perform this observation.

Visible Emissions Observation record
Part 2, Observations

Company _____ Observer_____

Test Number _____ Clock time_____

Method 9: A minimum of 25 readings every 15 seconds for a total averaging time of 6 minutes.
Method 22: A minimum of 15 minutes on each side of the building for a total duration of 75 minutes.

Date:		Visibility reduction every 15 Seconds (Opacity)				Steam Plume (check if applicable)		Comments
Hr	Min	0	15	30	45	Attached	Detached	

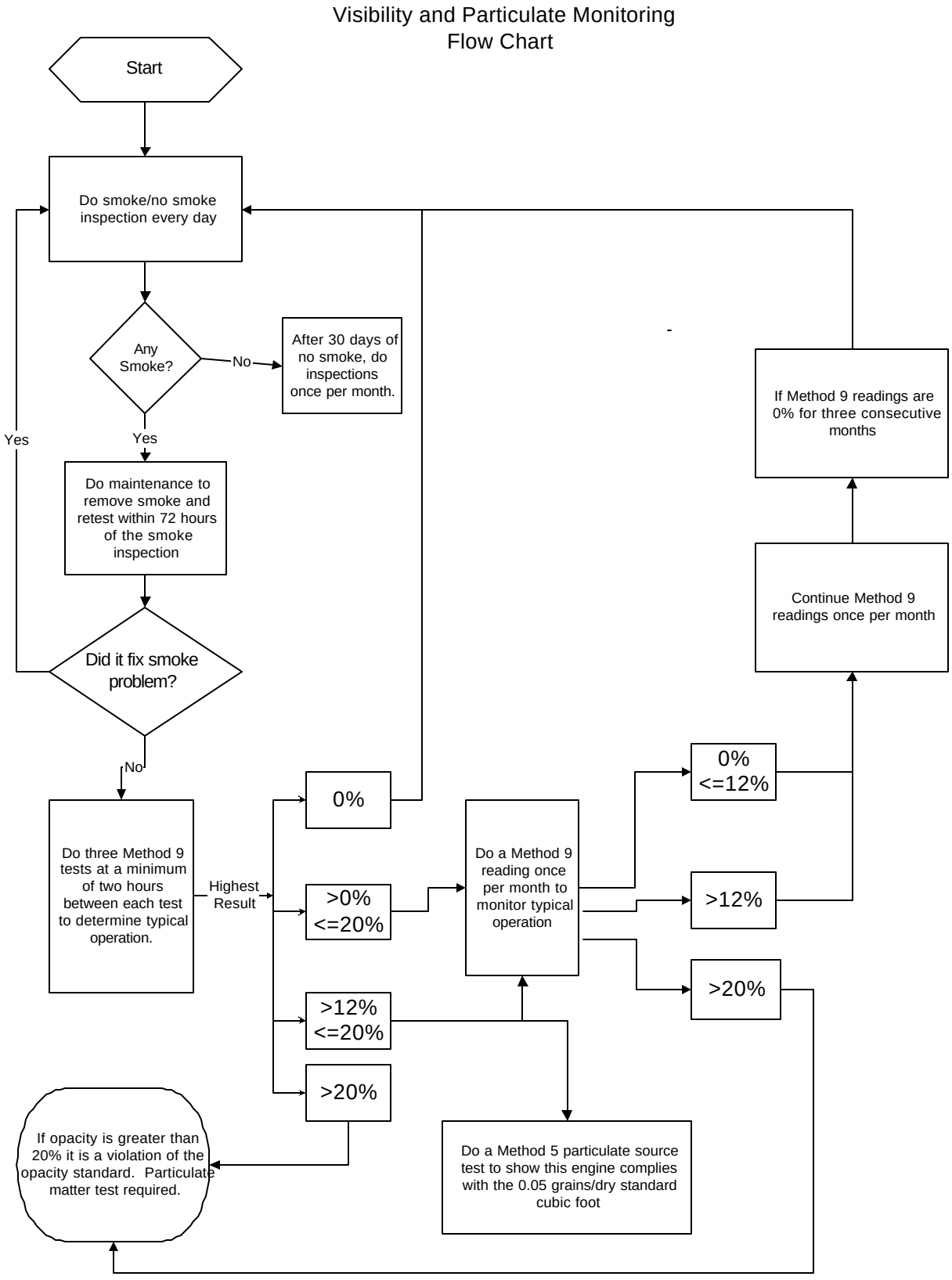
Additional information:

_____
Observer Signature

Average Opacity Summary

Set Number	Time Start--End	Opacity	
		Sum	Average

ATTACHMENT 2 Visibility and Particulate Monitoring Flow Chart



ATTACHMENT 3: Fugitive Dust and VOC Control Plan

SITE SPECIFIC PLAN FOR THE CONTROL OF FUGITIVE DUST EMISSIONS AND VOC EMISSIONS

DURING THE THERMAL SOIL REMEDIATION CLEANUP FOR THE US AIR FORCE WHITE ALICE COMMUNICATION SYSTEM AND POL STORAGE FACILITY IN COLD BAY, ALASKA

TPS Technologies Inc. has modified the Low Temperature Thermal Desorption Unit (LTTDU) to address VOC and fugitive dust issues in Cold Bay. The unique challenges presented on this project are the extreme weather conditions, constant high winds and frequent drizzling rain. The LTTD Unit, contaminated soil stockpile, and clean soil stockpile combined occupy a small laydown area of roughly 150 feet by 250 feet with no chance to expand. The treatment area is bordered on the North by the access road to the Cold Bay Dock, on the East by the Bering Sea, on the South by the proposed excavation, and on the West by a roadway. This area is serviced by two Cold Bay fire hydrants located within 150 feet of the site.

Jacobs Engineering is responsible for the soil from the excavation to the contaminated soil stockpile. TPS Technologies Inc., is responsible for the soil from the contaminated soil stockpile, through the screening and thermal remediation process and into the clean soil stockpile. Jacobs handles the soil from the clean soil stockpile, and back into the excavation area and compaction.

TPS Technologies Inc., will be using a front end loader to take the soil from the lined and covered contaminated soil stockpile, across weigh scales, and discharging into a vibratory screen. Due to the confined space on this project, the LTTDU has been equipped with the vibratory screen positioned directly on the feed hopper. The contaminated soil will be placed into the vibratory screen via the front-end loader. From the screen, the oversized material drops off the back of the screen and feed hopper, while the contaminated soil falls directly into the feed system. The feed hopper meters the soil onto a 5 foot long slinger belt that discharges the soil into the rotary kiln. The feed hopper is mounted 10 inches from the rear breaching of the rotary kiln. Metal shields are placed on each side of the slinger belt and the opening of the kiln is maintained under a negative pressure that draws VOC vapors and dust into the kiln. VOC and dust emissions are greatly reduced due to the compactness of this design.

In the kiln, the VOCs are desorbed from the soil in the thermal process and are destroyed in the afterburner. The clean soil is then discharged from the kiln via a screw auger/rehydration

chamber. The fines collected from the baghouse are carried in a closed auger to the discharge auger augering the soil from the kiln. The discharge auger is equipped with a raised hood that houses water spray nozzles used to rehydrate the clean hot soil. The operator controls these spray nozzles. In case of emergency, a flood valve is installed to flood the discharge auger. The spray hood provides enough volume for the steam to form and holds the steam while the water spray constantly recondenses the steam and rehydrates the soil prior to discharging into the pit.

The pit is lined on three sides by plywood or steel walls with low volume water spray nozzles misting this area to aid in controlling fugitive emissions. From the discharge area, the clean soil is picked up with the loader and placed on the lined and covered clean stockpile.

Four full circle irrigation spray heads, with a capacity of 15 gallons/minute that covers a 60 foot diameter each, will be used to dampen the site if needed. For portability, PVC tubing will connect the irrigation sprinklers. These irrigation heads can be placed upwind and relocated whenever necessary (due to wind direction change) and will be manually operated when needed.

ATTACHMENT 4: Source Test Operational Parameter Recording

Continuously monitor the following parameters and record the average value

- ❑ the contaminated soil processing rate: _____ tons/hour (if the facility processes contaminated soil)
- ❑ water flow rate(s) used to spray processed soil for particulate control: _____ gallons/minute
- ❑ the fines percentage _____ [<200 mesh using ASTM 422-63(1990)]
- ❑ Perform Method 9 opacity readings, 10 6minute averages for each Method 5 test run. Compute the Average hourly opacity for the Method 5 test.

For a facility using a baghouse:

- ❑ the baghouse exit temperature: _____ EF
- ❑ the pressure drop across the baghouse: _____ inches of water

For a facility using a scrubber:

- ❑ the pressure drop across the scrubber: _____ inches of water
- ❑ water flow rate: _____ gallons/minute

Obtain the following information:

- ❑ obtain a representative sampling of the fines percentage (-200 mesh)

For a facility using a scrubber, record the following parameters:

- ❑ pond size: _____
- ❑ pond depth: _____
- ❑ type of liner used: _____
- ❑ is the water recycled ❑ Yes ❑ No
- ❑ makeup water flow rate: _____ gallons/hr

ATTACHMENT 5: Excess Emissions Reporting Form

Fax this form to: (907) 269-7508 Telephone: (907) 269-8888

Company Name

Facility Name

Reason for notification:

❑ **Excess Emissions** — *If you checked this box Fill out section 1*

❑ **Other Deviation from Permit Condition** — *If you checked this box fill out section 2*

When did you discover the Excess Emissions or Other Deviation:
Date:__/__/__ Time:__:__

Section 1. Excess Emissions

(a) Event Information (Use 24-hour clock):

	START Time: (hr:min)	**END** Time:	**Duration**
Date: _____	_____:_____	_____:_____	_____:_____
Date: _____	_____:_____	_____:_____	_____:_____
		Total:	_____:_____

(b) Cause of Event (Check all that apply):

❑ START UP ❑ UPSET CONDITION ❑ CONTROL EQUIPMENT
❑ SHUT DOWN ❑ SCHEDULED MAINTENANCE ❑ OTHER _____

Attach a detailed description of what happened, including the parameters or operating Conditions exceeded.

(c) Sources Involved:

Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device
_____	_____	_____	_____
_____	_____	_____	_____

(d) Emission Limit Potentially Exceeded

Identify each emission standard potentially exceeded during the event. Attach a list of ALL known or suspected injuries or health impacts. Identify what observation or data prompted this report. Attach additional sheets as necessary.

Permit Condition	Limit	Emissions Observed
_____	_____	_____
_____	_____	_____

(e) Excess Emission Reduction:

Attach a description of the measures taken to minimize and/or control emissions during the event.

(f) Corrective Actions:

Attach a description of corrective actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence.

(g) Unavoidable Emissions:

Do you intend to assert that these excess emissions were unavoidable?

❑ YES ❑ NO

Do you intend to assert the affirmative defense of 18 AAC 50.235?

❑ YES ❑ NO

Section 2. Other Permit Deviations

(a) Sources Involved:

Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device

(b) Permit Condition Deviation:

Identify each permit Condition deviation or potential deviation. Attach additional sheets as necessary.

Permit Condition	Potential Deviation

(c) Corrective Actions:

Attach a description of actions taken to correct the deviation or potential deviation and to prevent recurrence.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name:

Signature: Date:

ATTACHMENT 6

QUALITY ASSURANCE PLAN REQUIREMENTS FOR CARBON MONOXIDE AND OXYGEN CONTINUOUS EMISSION MONITORS FOR SOIL THERMAL TREATMENT UNITS Reference: 40 CFR 60, Appendices B & F.

1. CO/O2 CEM span values not to exceed (NTE) 250ppm, and NTE 25% O2.
2. A relative accuracy test audit (RATA) must be conducted within 90-operating days of startup, and once every 4 operating quarters if CO averages 50ppm or more.
3. A 3-point Calibration is required every 90-operating days. Calibration gas to be certified reference method (CRM) or Protocol 1 gas. Maximum strength is 150ppm CO and 25% O2. Calibration can be conducted coincident with a cylinder gas audit (CGA).
4. A CGA is allowed in lieu of a relative accuracy audit if the CO averages less than 50ppm.
5. For a CGA with CRM or protocol 1 low range audit gas, the low range CO concentration must be anywhere from 15 to 45ppm and from 75 to 150ppm for the high range audit gas. Clean ambient air can be zero gas.
6. Use a CO wand at least every 90-operating days to check for leaking fitting or valves on sample line. Also leak check just after sample line fitting or inline valve setting is changed.
7. Table of daily calibration drift limits.

DAILY CALIBRATION DRIFT LIMITS*

Time Period	**CO ppm. Must be the lessor of: % of Span, or (ppm for 250ppm span)**	**% O_2**	**Action Required******
6 out of 7 consecutive days**	5 (12.5)	0.5***	Adjust
One day	10 (25)	1.0	Adjust
5 consecutive days	10 (25)	1.0	Out of control repair/replace
One day	20 (50)	2.0	Out of control repair/replace

* To be conducted at the zero and high-level values. See above reference.
** 7 - day drift test with out adjustment.
*** for 7 out of 7 consecutive days.
**** when limit is exceeded.

ATTACHMENT 7

[Code of Federal Regulations] [Revised as of July 1, 1997]
From the U.S. Government Printing Office via GPO Access
[CITE: 40CFR89.2]

TITLE 40--PROTECTION OF ENVIRONMENT
CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY

PART 89--CONTROL OF EMISSIONS FROM NEW AND IN-USE NONROAD ENGINES--
Table of Contents

Subpart A--General

Sec. 89.2 Definitions.

The following definitions apply to part 89. All terms not defined herein have the meaning given them in the Act.

Nonroad compression-ignition engine means a nonroad engine which utilizes the compression-ignition combustion cycle.

Nonroad engine means:

(1) Except as discussed in paragraph (2) of this definition, a nonroad engine is any internal combustion engine:

(i) in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or

(ii) in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or

(iii) that, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(2) An internal combustion engine is not a nonroad engine if:

(i) the engine is used to propel a motor vehicle or a vehicle used solely for competition, or is subject to standards promulgated under section 202 of the Act; or

(ii) the engine is regulated by a federal New Source Performance Standard promulgated under section 111 of the Act; or

(iii) the engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. This paragraph does not apply to an engine after the engine is removed from the location.

[59 FR 31335, June 17, 1994, as amended at 61 FR 52102, Oct. 4, 1996]